

PROCEEDINGS
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DESCRIPTION OF A NEW SPECIES OF BLIND EEL,
OF THE GENUS *ANGUILLA*.

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[Contribution from U. S. Bureau of Fisheries.]

On July 31, 1902, during a cruise of the schooner *Grampus* to the tile-fish grounds lying on the inner edge of the Gulf Stream, the writer collected at the surface, 60 miles south of Nomans Land, a small eel which represents a hitherto unknown species of *Anguilla*, and is here diagnosed and figured.

Anguilla cæca Smith, new species.

Similar to the common eel, *Anguilla chrisypa* Rafinesque, but with the head and snout somewhat broader, the mandible longer and more projecting, the eyes completely covered by skin and the body uniformly black. Body cylindrical anteriorly, compressed posteriorly, the depth contained 2.7 times in length of head; head about .12 total length; mouth large, lower jaw strongly projecting; teeth small, in a band in each jaw, a small patch also on vomerine; anterior nostrils tubular, posterior nostrils simple pits in front of eye; a large pore on each side half-way between nostrils, and a row of large pores on each side of lower jaw; branchial aperture vertical, about length of base of pectoral, extending below base of pectoral; pectoral fins well developed, .25 length of head; dorsal origin posterior to gill-opening a distance equal to 1.6 length of head; anal origin posterior to dorsal a distance equal to .66 length of head. Scales not evident. Skin uniformly jet black; fins dark reddish brown by transmitted light; skin over eyes not appreciably thinner than elsewhere. Eyes about as large as

those of common eel of same size and placed posterior to the angle of the mouth, their position indicated by a slight elevation.

The type, 6 cm. long, has been deposited in the United States National Museum, and is numbered 51,483 on the fish register.

From the foregoing description it will be seen that this species closely resembles *A. chrisypa*. Comparing it with a specimen of the common eel of the same size, of the pale, translucent type, taken from a tributary of Casco Bay, Maine, May 13, 1903, the most striking differences, besides the absence of functional eyes, are in the length of the lower jaw and the location of the eyes posterior to the angle of the mouth, as shown in the accompanying figures of these two specimens.

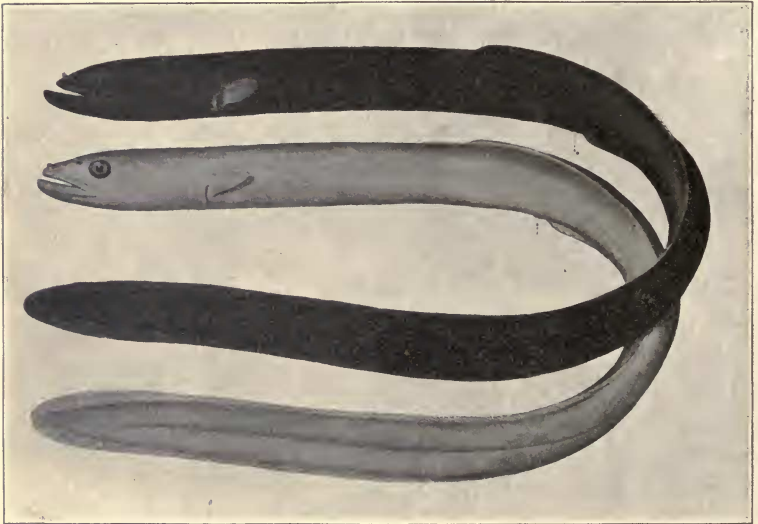


FIG. 1. Comparison of type of *Anguilla caeca* Smith (upper figure) with specimen of *Anguilla chrisypa* Rafinesque (lower figure) of same size.

Although this fish was found at the surface, in a locality where the water was about 50 fathoms deep, it is evident that it is a bottom species, and that the type was a stray.